

# **RF Exposure Report**

Report No.: SA171027E06B

FCC ID: O6L-VM2506

Test Model: VM2506

Received Date: Nov. 10, 2017

Test Date: Dec. 14, 2017

Issued Date: July 06, 2018

Applicant: TRANWO TECHNOLOGY CORP.

Address: No.236, Sec. 3, Huanbei Rd., Jubei City, Hsinchu County 30265, Taiwan

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

Hsin Chu Laboratory

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Taiwan R.O.C.

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### **Release Control Record**

Issue No.	Description	Date Issued
SA171027E06B	Original release.	July 06, 2018

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#### 1 Certificate of Conformity

Product: 2.4GHz Digital RF Module

**Brand: TRANWO** 

Test Model: VM2506

Sample Status: ENGINEERING SAMPLE

Applicant: TRANWO TECHNOLOGY CORP.

**Test Date:** Dec. 14, 2017

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Claire Kuan / Specialist

**Approved by :** , **Date:** July 06, 2018

May Chen / Manager



#### 2 RF Exposure

## 2.1 Limits For Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (minutes)	
Limits For General Population / Uncontrolled Exposure					
0.3-1.34	614	1.63	(100)*	30	
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30	
30-300	27.5	0.073	0.2	30	
300-1500			f/1500	30	
1500-100,000			1.0	30	

f = Frequency in MHz; \*Plane-wave equivalent power density

#### 2.2 MPE Calculation Formula

 $Pd = (Pout*G) / (4*pi*r^2)$ 

where

Pd = power density in mW/cm<sup>2</sup>

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

#### 2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

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#### 2.4 Antenna Gain

Model Name	Antenna Net Gain (dBi)	Frequency range (GHz)	Antenna Type	Connecter Type
VM2506RX(202-000520-00)	2	2.4~2.5	Dipole	i-pex(MHF)
VM2506TX(202-000521-00)	2	2.4~2.5	Dipole	i-pex(MHF)

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# 2.5 Calculation Result of Maximum Conducted Power

Frequency Band (MHz)	Max Power	Antenna Gain	Distance	Power Density	Limit
	(mW)	(dBi)	(cm)	(mW/cm <sup>2</sup> )	(mW/cm²)
2412-2462	506.991	2	20	0.15986	1

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